


### Features

- Shielded construction
- Unit height of 5.9 mm
- Inductance range: 0.22 to 10  $\mu$ H
- Current up to 45 A
- RoHS compliant\*

 This series is currently available, but not recommended for new designs. The newer [SRP1245A](#) series is recommended.

## SRP1250 Series - Shielded Power Inductors

### Electrical Specifications

| Bourns Part No. | Inductance L ( $\mu$ H) $\pm 20$ % | I rms (A) | I sat (A) | DCR (m $\Omega$ ) Max. |
|-----------------|------------------------------------|-----------|-----------|------------------------|
| SRP1250-R22M    | 0.22                               | 45        | 80        | 1.0                    |
| SRP1250-R36M    | 0.36                               | 41        | 75        | 1.1                    |
| SRP1250-R47M    | 0.47                               | 38        | 65        | 1.3                    |
| SRP1250-R50M    | 0.50                               | 36        | 55        | 1.5                    |
| SRP1250-R56M    | 0.56                               | 36        | 55        | 1.5                    |
| SRP1250-R68M    | 0.68                               | 34        | 54        | 1.7                    |
| SRP1250-R82M    | 0.82                               | 31        | 53        | 2.3                    |
| SRP1250-1R0M    | 1.00                               | 29        | 50        | 2.5                    |
| SRP1250-1R2M    | 1.20                               | 27        | 49        | 3.3                    |
| SRP1250-1R5M    | 1.50                               | 23        | 48        | 4.1                    |
| SRP1250-1R8M    | 1.80                               | 21        | 40        | 4.7                    |
| SRP1250-2R2M    | 2.20                               | 20        | 32        | 5.5                    |
| SRP1250-2R7M    | 2.70                               | 17        | 32        | 7.3                    |
| SRP1250-3R3M    | 3.30                               | 15        | 32        | 9.2                    |
| SRP1250-4R7M    | 4.70                               | 12        | 27        | 15.0                   |
| SRP1250-6R0M    | 6.00                               | 9.5       | 14        | 10.0                   |
| SRP1250-6R8M    | 6.80                               | 11        | 21        | 18.5                   |
| SRP1250-7R8M    | 7.80                               | 10        | 18        | 20.5                   |
| SRP1250-9R0M    | 9.00                               | 10        | 18        | 22.5                   |
| SRP1250-100M    | 10.0                               | 9         | 16        | 25.5                   |

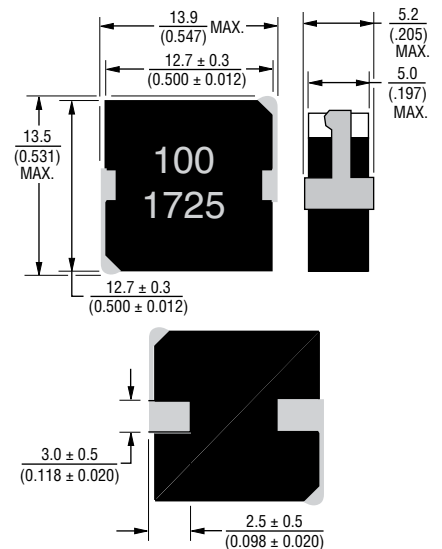
### General Specifications

Test Voltage ..... 1 V  
 Test Frequency ..... 100 KHz  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 ..... -55 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature  
 ..... -55 °C to +150 °C  
 Resistance to Soldering Heat  
 ..... +260 °C for 10 sec.

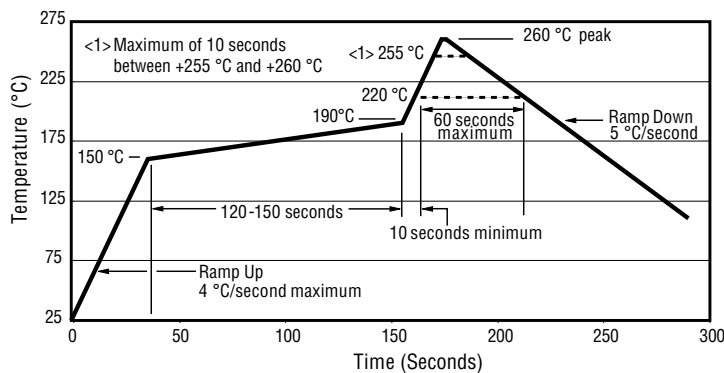
### Materials

Core ..... Iron  
 Wire ..... Enameled copper  
 Terminal ..... Cu/Sn  
 Rated Current ..... Ind. drops 20 % at Isat  
 Temperature Rise ..... 40 °C at rated I rms  
 Packaging ..... 500 pcs. per 13-inch reel

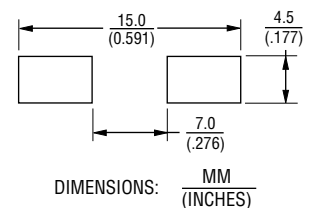
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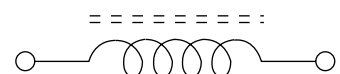
### Soldering Profile



### Recommended Layout



### Electrical Schematic



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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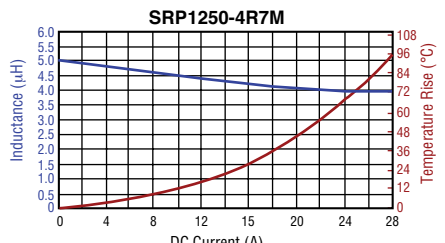
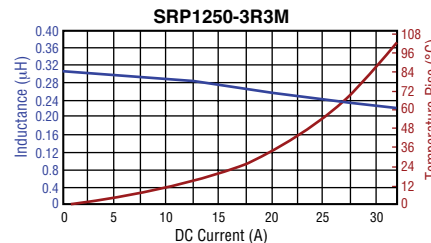
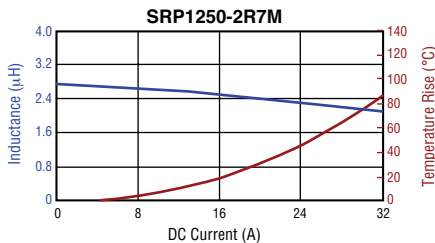
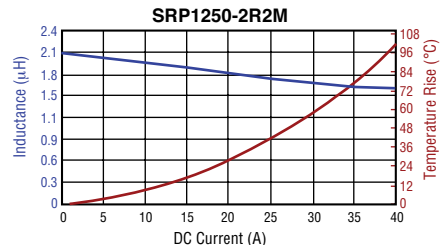
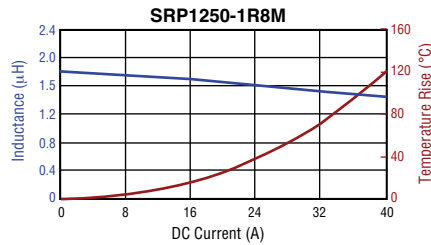
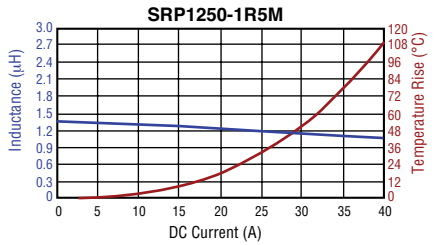
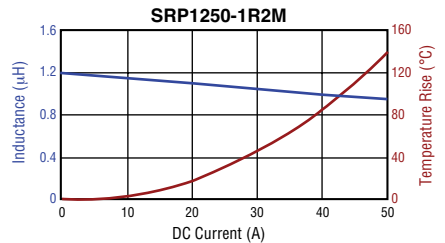
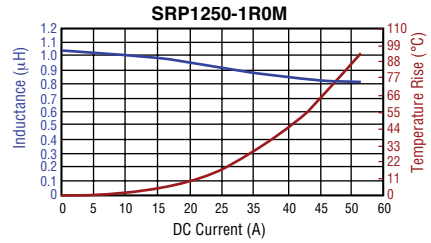
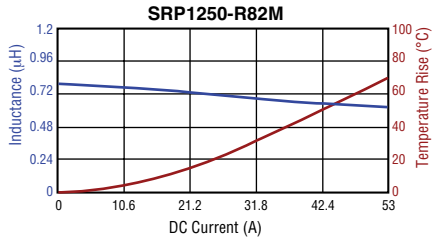
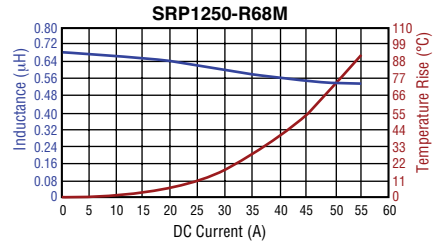
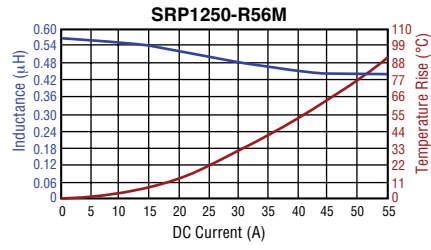
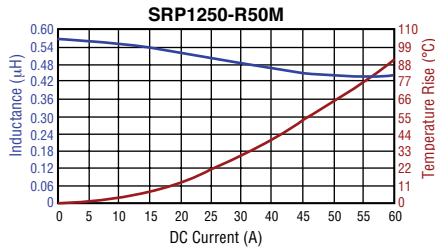
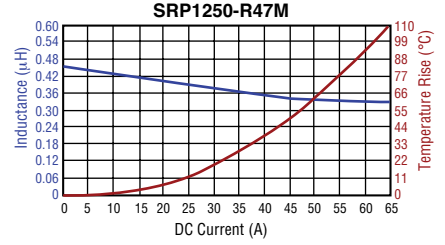
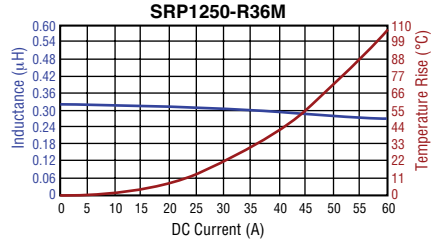
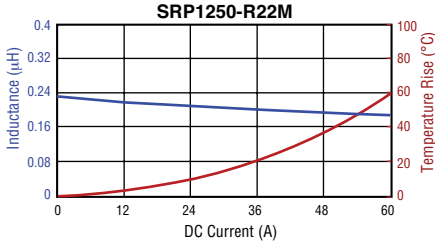
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# SRP1250 Series - Shielded Power Inductors



## L vs. I Charts

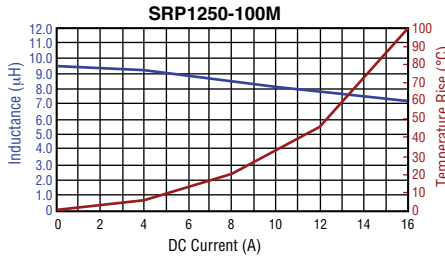
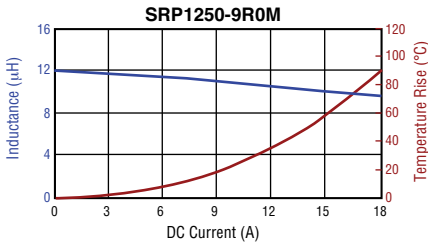
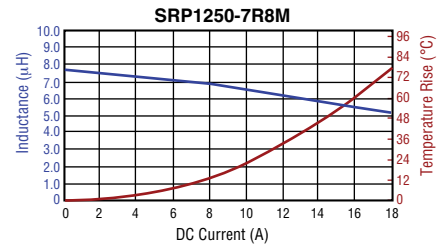
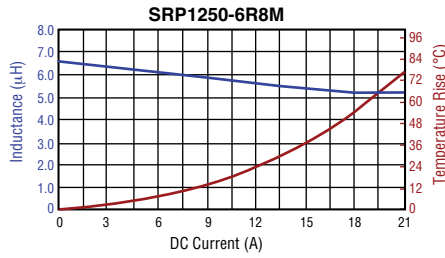
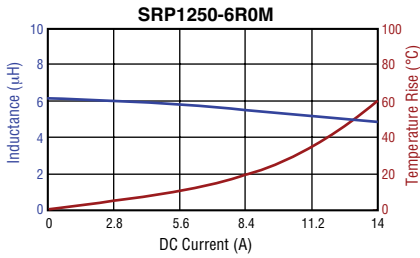


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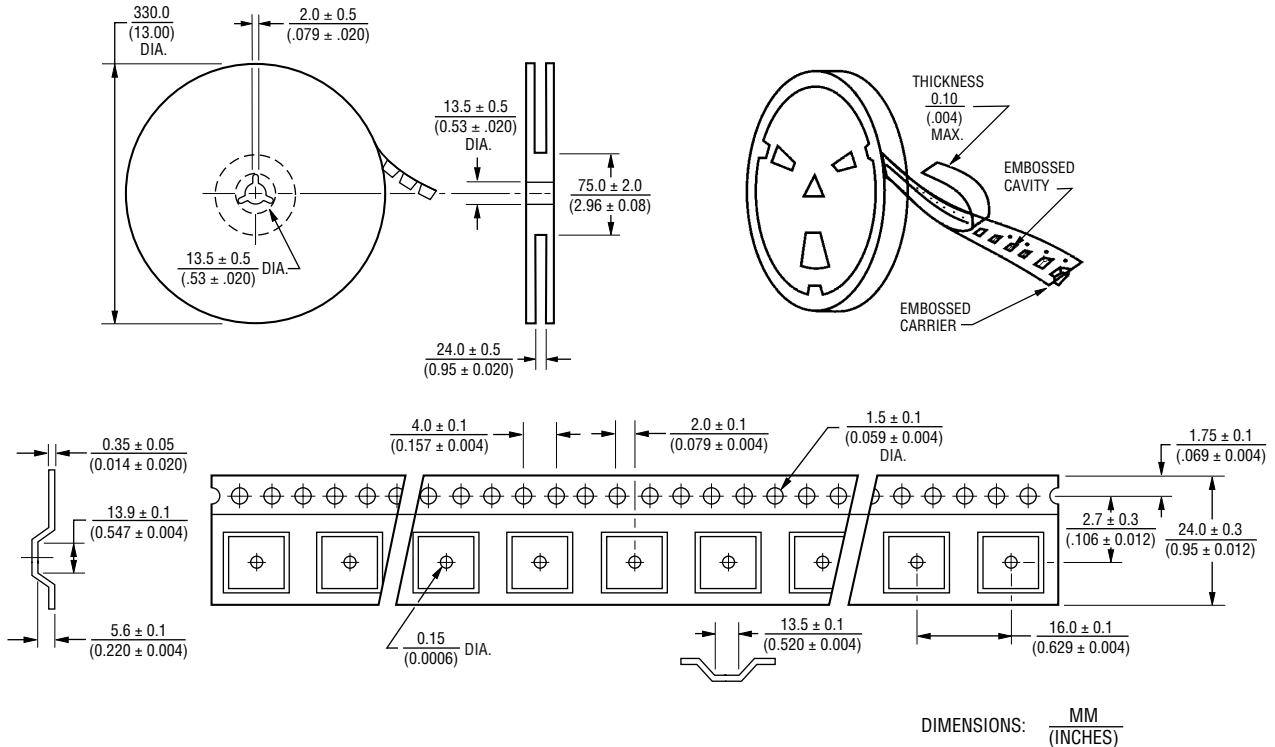
# SRP1250 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



## Packaging Specifications



REV. 06/19

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